

**Translation**

PATENT COOPERATION TREATY

PCT/EP2003/011135



**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**  
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference WO 39694	<b>FOR FURTHER ACTION</b> See Form PCT/IPEA/416	
International application No. PCT/EP2003/011135	International filing date ( <i>day/month/year</i> ) 08 October 2003 (08.10.2003)	Priority date ( <i>day/month/year</i> ) 09 October 2002 (09.10.2002)
International Patent Classification (IPC) or national classification and IPC H04B 7/185		
Applicant ND SATCOM AG		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>6</u> sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> ( <i>sent to the applicant and to the International Bureau</i> ) a total of <u>6</u> sheets, as follows: <div style="margin-left: 40px;"><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</div> b. <input type="checkbox"/> ( <i>sent to the International Bureau only</i> ) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items: <div style="margin-left: 40px;"><input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application</div>

Date of submission of the demand 06 May 2004 (06.05.2004)	Date of completion of this report 14 January 2005 (14.01.2005)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2003/011135

## Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages \_\_\_\_\_ 1-40 \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- pages \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_, as amended (together with any statement) under Article 19
- pages\* \_\_\_\_\_ 1-17 \_\_\_\_\_ received by this Authority on \_\_\_\_\_ 19 July 2004 (19.07.2004)
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- pages \_\_\_\_\_ 1/7-7/7 \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/EP 03/11135

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims		YES
	Claims	1-17	NO
Inventive step (IS)	Claims		YES
	Claims	1-17	NO
Industrial applicability (IA)	Claims	1-17	YES
	Claims		NO

### 2. Citations and explanations

#### 1. Reference is made to the following documents:

D1: US-B-6 366 7611 (MONTPETIT MARIE-JOSE)

2 April 2002 (2002-04-02)

D2: EP-A-0 680 168 (AT & T CORP) 2 November 1995

(1995-11-02)

#### 2. The application does not meet the requirements of PCT Article 6 since claims 1, 9 and 17 are unclear.

#### 2.1 Claim 1 does not meet the requirements of PCT Article 6 since the subject matter for which protection is sought is not clearly defined. The claim attempts to define the subject matter by the result to be attained but in so doing merely indicates the problem to be solved, without providing the technical features necessary for achieving this result.

In claim 1, page 2/6, lines 15 to 17, it is not clear how the contributions which can be transmitted in a time-staggered manner are shifted and how the transmitting stations are coordinated.

- 2.2 In claim 1, page 2/6, lines 15 and 16, the phrase "contributions which can be transmitted in time-staggered manner are shifted within the frequency-time diagram" is unclear.

It is not clear whether the contributions are shifted in terms of time or frequency.

Moreover, the applicant is invited to indicate the passages in the originally filed application which support the amendment to the claim.

- 2.3 It is not clear what is meant by the phrase "the area of the traffic contributions is maximized" (claim 1, page 2/6, lines 14 and 15).  
It is to be understood that the use of the bandwidth is to be optimized, e.g. the carriers are distributed such that they are adjoining, in order to minimize frequency separation.

The objections in the above points also apply to independent claims 9 and 17.

3. In addition to the above-mentioned lack of clarity, the subject matter of claim 1 also lacks novelty within the meaning of PCT Article 33(2), such that the requirements of PCT Article 33(1) are not met.

Moreover, this IPEA does not agree with the applicant's interpretation of D1 and D2.

D1

Re only the amendments to claim 1:

The transmitting stations in D1 are coordinated. In

fact, the packets can be transmitted by a plurality of transmitting stations, which of necessity are coordinated since conflicts have to be prevented. In D1, the transmittable contributions are at least time-staggered, since packets cannot all be transmitted at once.

D1 discloses two types of traffic: real time (audio and video) and time-staggered (e-mail).

Therefore the subject matter of claim 1 is not novel.

#### D2

The applicant's letter states that the teaching of D2 does not concern the management of the transmission capacity of the relay station by the latter. However, in claim 1, management is controlled by the control unit CTRL (figure 3, and page 14 of the description). This control unit coordinates transmission, forwarding and reception.

D2 also mentions a central control unit (figure 5, for example) which manages the transmission means.

Therefore the objection concerning novelty in relation to D2 is sustained.

The observations in the above points likewise apply to independent claims 9 and 17.

Therefore the subject matter of claims 9 and 17 is likewise not novel.

4. Contrary to the requirements of PCT Rule 5.1(a)(ii), the description did not cite D1 and D2 or the

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**

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relevant prior art contained therein.

5. Independent claims 1, 9 and 17 have not been drafted in the two-part form, as required pursuant to PCT Rule 6.3(b). However, in the present case the two-part form would appear to be appropriate. Therefore the features known together from the prior art (D1) should appear in the preamble (PCT Rule 6.3(b)(i)), with the other features appearing in the characterizing part (PCT Rule 6.3(b)(ii)).